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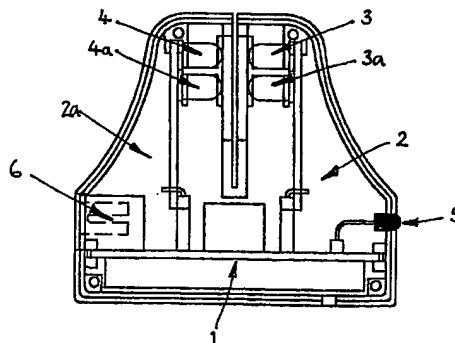
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(54) Title: METHOD AND APPARATUS FOR VERIFYING THE AUTHENTICITY OF BANK NOTES



(57) **Abstract:** A method and apparatus for verifying the authenticity of bank notes or other notes having a security thread embedded therein is provided. Said method and apparatus enabling both small businesses and individuals to determine the authenticity of bank notes when they are taken or received as payment for goods or services and also enabling financial institutions and banks to determine the authenticity of large volumes of bank notes. In use, a small, highly reliable, cost effective unit is provided which accurately and instantaneously determines the authenticity of bank notes. The apparatus comprises a scanning unit for obtaining various characteristics of the bank note being scrutinised, the scanning unit comprising at least one light source disposed opposite to at least one detector, wherein said at least one detector outputs a signal responsive to the transmitted light. Said at least one light source and said at least one detector being disposed such that the bank note can pass therebetween. As the bank note is swiped between the at least one light source and at least one detector the resultant output is processed, digitally encoded and correlated with stored characteristics corresponding to the transmission properties of an authentic bank note. These stored characteristics corresponding to the transmission properties of an authentic bank note are obtained by calibrating the apparatus with an authentic bank note. The method and apparatus can also be implemented to authenticate large volumes of bank notes.